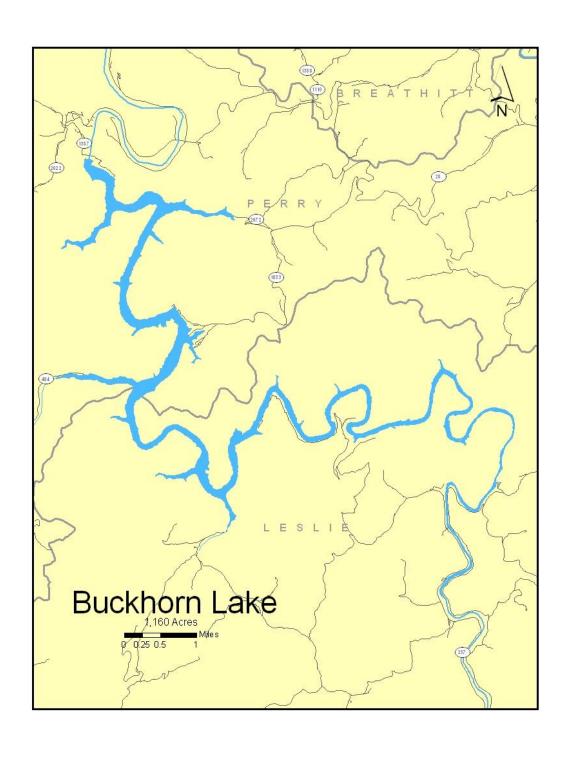
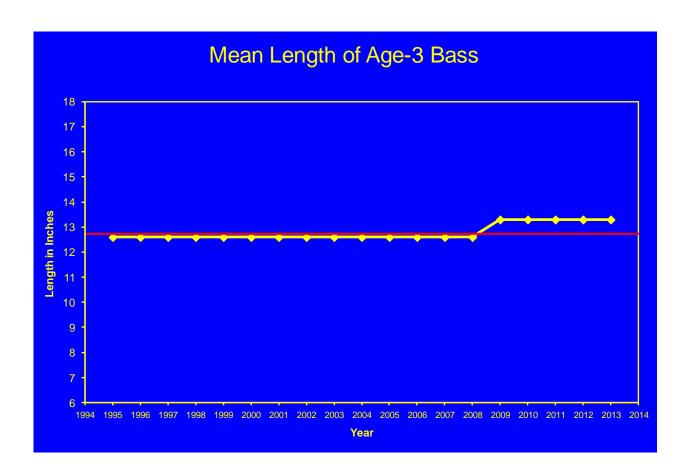
#### **Buckhorn Lake Bass Assessment 2013**

Buckhorn Lake, located in Leslie and Perry Counties, is a 1,230 acre multipurpose reservoir on the Middle Fork of the Kentucky River. Buckhorn is one of three lakes in Kentucky that provide the opportunity to catch muskellunge. Buckhorn Lake is also popular for largemouth bass, white crappie, bluegill, channel catfish, and flathead catfish. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. Please see "Understanding The Largemouth Bass Assessment" article for an explanation of how the assessment works. *Please note that the minimum size limit for largemouth bass on this lake is 15.0 inches.* 



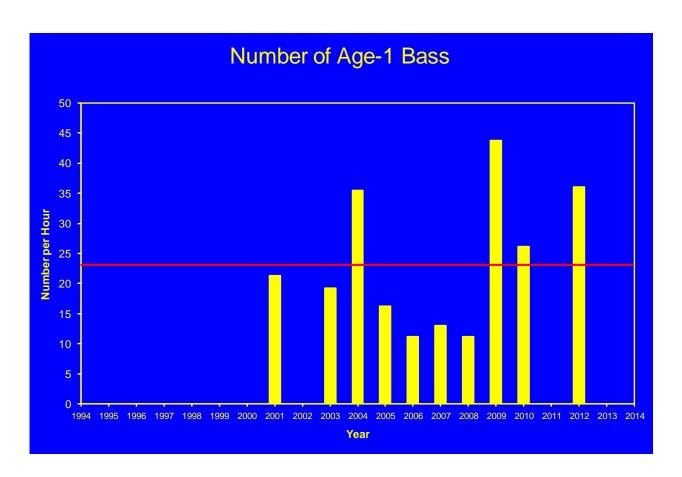
# Parameter 1 – Length at age-3 (growth rate)

At Buckhorn Lake, the length of an age-3 largemouth bass has averaged 12.8 inches (see red line). Compared to other reservoirs of similar size, largemouth bass generally exhibit excellent growth at Buckhorn Lake. Growth rates can be variable and are generally related to factors such as population density, food resources, and weather patterns. The most recent aging of largemouth bass at Buckhorn Lake was in 2009 and found that 3 year old largemouth experienced excellent growth, averaging 13.3 inches.



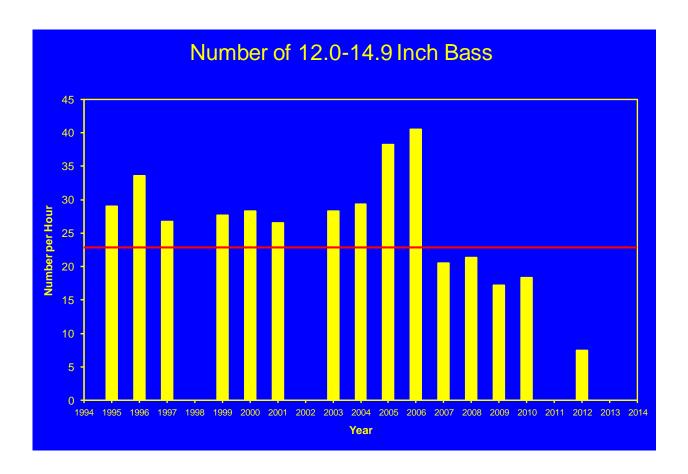
## Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the spring catch rates of age-1 largemouth bass to assess the success of the spawn which occurred in the prior year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Buckhorn Lake, the combined catch rate of wild and stocked age-1 largemouth bass averaged 23.36 fish per hour (red line) of electrofishing since 2001 which is considered "fair" compared to similar sized lakes. Age-1 catch rates have been up from 2009 – 2012 (no sample in 2011 and 2013). Age-0 largemouth bass stockings in the fall of 2008 and 2009 are largely responsible for the strong year classes observed in 2009-2010.



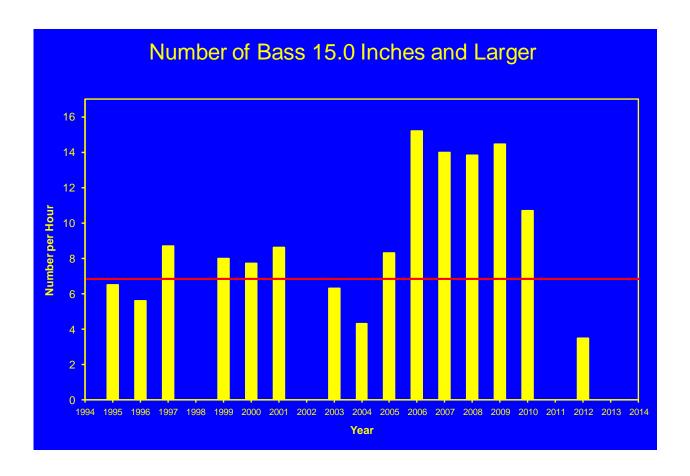
#### Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass has averaged 22.95 fish per hour as indicated by the red line. As compared to other lakes, this is a "fair" catch rate for this size group of bass. Below average catch rates of this size group have been experienced since 2007. High water events during this time period are likely leading to loss of this fish from the fishery. This number is important because these fish will soon grow to exceed the 15.0 inch legal size limit at the lake, and is a good predictor how bass fishing will be in years to come.



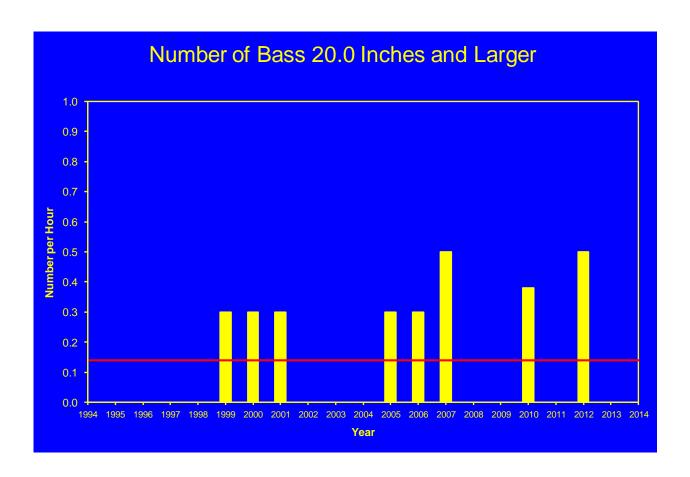
### Parameter 4 - Numbers of 15 inch and larger bass

The catch rate of 15.0 inch and larger largemouth bass at Buckhorn Lake has averaged 6.46 fish per hour of electrofishing (red line). Again, as compared to other lakes, this is a "fair" catch rate for this size group. However, from 2006-2010 there was an increased average of 13.63 fish per hour ("good"). This catch rate may fall some over the next couple years as numbers of 12.0-14.9 in fish have been down of recent. Stronger year classes from 2009 and 2010 will aid in eventually bringing this number back up.



### Parameter 5 - Numbers of 20-inch and larger bass

The electrofishing catch of 20.0 inch and larger largemouth bass has averaged about 0.13 fish per hour (red line) at Buckhorn Lake since 1986. This catch rate is considered "poor" when compared to other lakes in this size range. Thus, an angler fishing in Buckhorn Lake would have a better chance of catching several quality size bass than a genuine trophy. Even so, there are some big fish out there and that occasional trophy largemouth can not be completely ruled out.



### Overall – Total Assessment Score (All five parameters added together)

Overall, the largemouth bass fishery at Buckhorn Lake has averaged a "fair" rating assessment score of 11 since 2001 (red line). The overall assessment score for the largemouth bass population at Buckhorn Lake has bounced back and forth between fair and good in the past settling out at the upper end of the "fair" range (11) in 2012. With recent high water events this assessment is expected to dip slightly but remain in the fair category.

